

AMENDMENT UNDER 37 C.F.R. § 1.116
Appln. No. 09/673,143
Docket no. Q60989

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A power cable comprising:

a conductive material core; and

at least one covering layer, characterized in that said at least one covering layer is constituted essentially of a material comprising an inorganic compound made from a nanocomposite material and an organic compound positioned between layers of said inorganic compound, said organic compound being chosen from polyethylene, polypropylene, copolymer of ethylene and propylene, or mixture thereof, wherein the power cable is a medium-voltage to high voltage direct current power cable.

2. (original): A power cable according to claim 1, wherein said inorganic compound is an inorganic oxide.

3. (original): A power cable according to claim 2, wherein said inorganic oxide is clay chosen from kaolin, smectite, montmorillonite, bentonite, beidellite, nontronite, saponite, hectorite, vermiculite, wollastonite or a mixture thereof.

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4. (original): A power cable according to claim 3, wherein said clay is chosen from montmorillonite and bentonite.

5.-7. (canceled).

8. (currently amended): A power cable ~~according to claim 1, comprising:~~
a conductive material core; and
at least one covering layer, wherein the at least one covering layer comprises an insulative material layer constituted essentially of a nanocomposite material comprising an inorganic compound and an organic compound positioned between the layers of said inorganic compound, said organic compound being chosen from polyethylene, polypropylene, copolymer of ethylene and propylene, or mixture thereof, wherein the power cable is a medium-voltage to high voltage direct current power cable.

9. (previously presented): A power cable according to claim 1, wherein the at least one covering layer comprises a nanocomposite material constituted essentially of a nanocomposite material comprising an inorganic compound and an organic compound positioned between the layers of said inorganic compound.

10. (currently amended): The power cable ~~according to claim 1, comprising:~~
a conductive material core; and

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at least one covering layer, wherein the at least one covering layer comprises at least one semiconductor screen, characterized in that the at least one semiconductor screen is constituted essentially of a material comprising an inorganic compound made from a nanocomposite material having an exfoliated layered structure and an organic compound inserted positioned between the layers of said inorganic compound, said organic compound being chosen from polyethylene, polypropylene, copolymer of ethylene and propylene, or mixture thereof, wherein the power cable is a medium-voltage to high voltage direct current power cable.

11.-15. (canceled).

16. (previously presented): The power cable of claim 1, wherein said inorganic compound is clay and an agent that makes said inorganic compound compatible with said organic compound is chosen from a quaternary ammonium salt, and an oxide of polyethylene and a phosphorus-containing derivative.

17. (previously presented): The power cable of claim 1, wherein the at least one covering layer comprises:

an insulative material layer constituted essentially of a nanocomposite material comprising an inorganic compound having an exfoliated layered structure and an organic compound inserted between the layers of said inorganic compound; and

an external covering layer constituted essentially of said nanocomposite material.